



# DNG-200 LOW FOG GENERATOR USER MANUAL

## DNG-200 低煙機使用說明書



Read and save these instructions  
2008 Antari Lighting & Effects Ltd.



## User Manual

### Antari DNG-200 Low fog Generator

Congratulations on the purchase of your new  
ANTARI DNG-200 Low Fog Generator

Thank you for choosing this DNG-200 of ANTARI! There are some new terrific features of this machine on top of the fog cooling provided by the DNG-100 originally. The fog generator is integrated into this new machine to make sure the machine will not take too much space in order to maximize the usage of the entire stage.

Different from others, Antari 's fogging machines do not use Carbon Dioxide, no pollution to environment and to any human body. It is a great machine that offers low fog special effects as well as environmental-friendly features, a true green machine.

Please follow these operation, safety and maintenance instructions to ensure a long and safe life for your Low Fog Machine.

**Pay attention to all warning labels and instructions printed on the exterior of your ANTARI DNG-200**

#### 1. CAUTION

- ◆ Keep this device dry.
- ◆ For indoor use only. Not designed for outdoor use.
- ◆ Ideal operating temperature is between 10 - 30 degrees Celsius.
- ◆ Two sets of professional power cord are used by this machine. It is important to confirm the electrical voltage before plugging the power cord into the power outlet and use three-plug ground connecting type power cord shall be used.
- ◆ If the machine is moved or transported, it shall be stationed for one hour to allow the coolant in the cooler to be stabilized before using it again.
- ◆ If the machine is moved horizontally, please station it for 5 minutes before starting the operation again.
- ◆ Please unplug the power cord or Turn off if the machine is not in-use.
- ◆ This machine is not water-proof. If moisture, water, or fog fluid gets inside the housing, immediately unplug the unit and clean it. If liquid seepage into machine and not easy to clean, please contact a service technician or your ANTARI dealer before using it again.
- ◆ No user serviceable parts inside. Refer to your ANTARI dealer or other qualified service personnel.
- ◆ For adult use only. DNG-200 must be installed out of the reach of children. Never leave the unit running unattended.
- ◆ Locate the DNG-200 in a well-ventilated area. Never cover the unit's vents. The DNG-200 is best installed 1 meter away from all objects.
- ◆ It is important to place the machine in a flat surface instead of a surface with slope to prevent any moving of the machine .
- ◆ If your ANTARI DNG-200 Low Fog Generator fails to work properly, please turn off the power for five minutes and turn it on again, if the problem still exists, contact with your ANTARI dealer for service.
- ◆ Always allow your ANTARI Low Fog Generator to cool down before attempting to clean or service it.
- ◆ Please use Antari FLR Light Fog Fluid Only. Please do not fill in any other fluid into the tank to ensure the quality of the fog and the life of the machine.

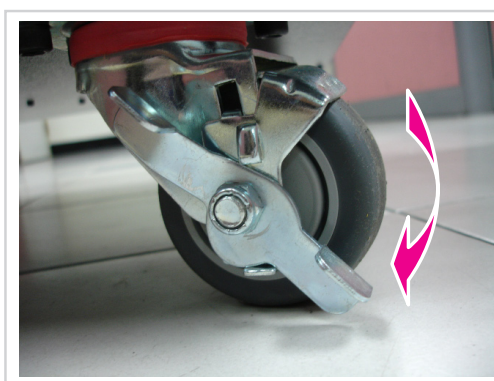
## 2. Unpacking & Inspection

Open the shipping carton and verify that all equipment necessary to operate the system has arrived intact. The shipping carton should contain the following items:

1. One unit DNG-200 Machine
2. One unit of D-20 LCD controller (installed in the machine already)
3. Two power cords for connecting to Neutrik Powercon connector.
4. Three meters of fog conducting hose.
5. One user's manual  
( item 3-5 placed in the storage box on the top of the machine)
6. One water collection tray (installed in the machine already)
7. Three meters of 6mm PU tube

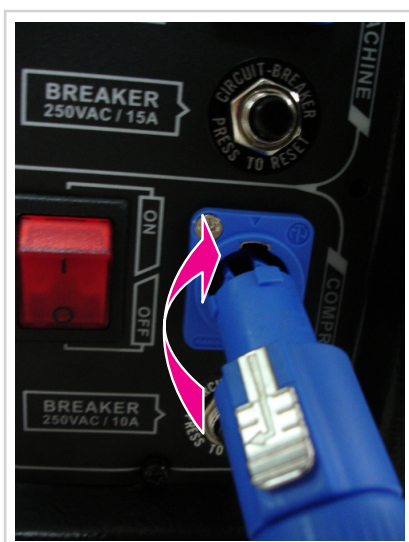
## 3. Procedures of Installation

- 3-1. The wheels at the bottom of DNG-200 help to move the machine, wheel fixing mechanisms are located at the diagonal line. Position the machine at a spot, press down the fixing mechanism to prevent it from moving. To move the machine, press the opposite side of the fixing mechanism to release it. Please note that the machine is not allowed to place on a slope due to its big size.  
( refer to the figure 1.)



◀ Figure 1

- 3-2. Please aim the key on the Powercon terminal of the power cord to the slot of the connector on the machine, plug in and turn about 10 degrees clockwise until the power cord is completely fixed. Two power cords shall be plugged to the machine in the same fashion. The upper power cord is for fog generator and the bottom one is for the compressor. ( refer to the figure 2&3)



◀ Figure 2



◀ Figure 3

- 3-3. Connecting the machine with the black fog conducting hose, it is a three-meter pipe. The actual length of the pipe can be adjusted to fit the actual need. (refer to the figure 4)
- 3-4. Fill Antari FLR light fog fluid to the tank, tighten the tank cap. (refer to the figure5)



◀ Figure 4



◀ Figure 5

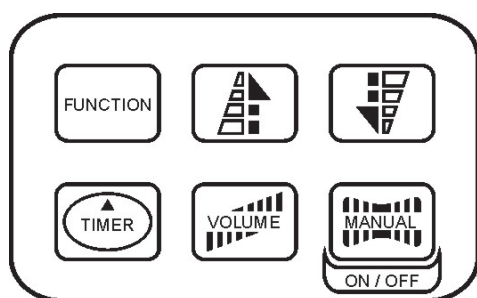
## 4. Operation

- 4-1. Connect the power cord to a grounded outlet, press down two sets of power switches located at the back side of the machine. **Please press power switch of compressor below first and then power switch of fog machine** to start warming up. The LCD screen on the D-20 controller will show "Warming up". Please wait till the LCD screen shows "Ready To Fog".
- 4-2. Set all required output modes on the controller. Please refer to D-20 controller operation description.
- 4-3. DNG-200 is equipped with DMX 512 system, a 3-pin and a 5-pin DMX connectors are located at the back panel of the machine for optional use. Please refer to DMX operation description for more DMX information.
- 4-4. For the first time operation, after the warming up period and the controller screen displays "Ready To Fog", press down Manual button for a few seconds to initiate the machine to output fog in order to drain out the air in the liquid pipe. Once the fog comes out smoothly, D-20 controller can be set. If the machine is not frequently used, please follow this procedure every time it is used to drain out the air.
- 4-5. The heater average temperature of DNG-200 is 220°C.

## 5. D-20 LCD screen controller

D-20 controller is equipped with a 2-meter line, a 5-pin XLR connector and a LCD display panel. It is able to fully display the operation status of the machine. Its interface allows the operator to customize fog machine functions by adjusting fogging duration, interval, volume and DMX. The controller can be easily used by pushing six function buttons on the panel. Its LCD displays current operating parameters, which are automatically stores in non-volatile memory, allowing the machine to be powered down without losing function settings.

Controller panel and function button description: (refer to figure)

1. **FUNCTION**

Sub-menus:

- >Interval Set
- >Duration Set
- >Volume Out
  - >Nonstop Burst
  - >High Volume
  - >Medium Volume
  - >Low Volume
- >DMX 512 Add



Up-/Down-button



3. Timer-button




4. Volume-button




5. Manual-button

**5-1. Function button****5-1-1. Setting of fog output interval:**


Press the **Function** button once, the screen will display "Interval Set". Under the time counting mode of the timer, press  Up/Down keys to adjust the interval of fog output. The setting range is between 10 to 300 seconds.

**5-1-2. Setting of fog output duration:**

Press the **Function** button twice, the screen will display "Duration Set". Under the time counting mode of the timer, press  Up/Down keys to adjust the duration of fog output. The setting range is between 10 to 100 seconds.

To release the setting of Interval and Duration, press **Timer** button one time after initiating **Timer** button and entering into work mode.

**5-1-3. Setting of fog output volume:**

Press the **Function** button three times, the screen will display four settings of "Volume Out", press  Up/Down keys to select the setting of fog output volume.

Four volume settings:


Nonstop Burst -- The machine will continue to output low fog, the volume is automatically adjusted by the machine based on the working temperature.

High Volume -- About 60% output volume.

Medium Volume -- About 52% output volume.

Low Volume -- About 35% output volume.

**5-1-4. Setting of DMX 512 address**

Press the **Function** button four times, the screen will display "DMX 512 Add", press  Up/Down keys to set the machine address the same as that of DMX console. Please refer to DMX setting description for more DMX setting information.

**5-2. Timer function key**

Initiate timer function to enter Interval and Duration function mode, press **Timer** one more **Timer** to release the function.

**5-3. Volume function key**

Used for setting Volume Out (Fog volume output), a total of four setting values. After initiating the machine will request for the fog volume according to the setting output mode, press **Volume** key one more time to release the function.

**5-4. Manual function key**

Press down **Manual** key the screen will display "Manual Output", under this function the low fog has the biggest fog output volume.

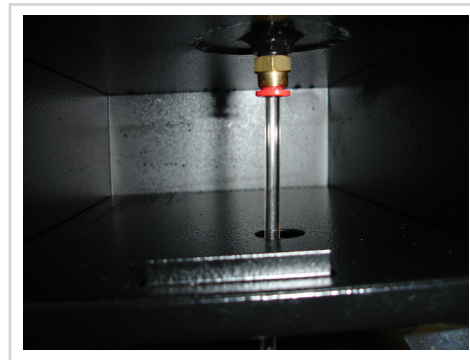
## 6. Other important notes

- 6-1. A water collection tray is equipped at the rear of DNG-200, when the compressor is running for condensed fog, some water drops will flow into the tray. Please check if the water in the tray is full and drain it routinely.(refer to the figure 6)

If the machine is to be used for long time or the water drops can not be checked momentarily, the water collection tray can be removed and a 6 mm PU hose can be connected to the water draining hole located at the upper of the water collection tank to directly drain out the water drops. After finishing draining, push up the upper red button to remove the hose. (refer to the figure 7)



◀Figure 6



◀ Figure 7

- 6-2. DNG-200 is equipped with a pump temperature sensor, when the fog fluid is used up in the tank, pump will stop running due to the rising of the temperature. When the machine temperature drops down, the pump will resume to run. Please check to see if the fog oil is sufficient in the fluid tank.
- 6-3. A black square metal mesh is located at the back of the machine. It is the air inlet of the fan, please do not block it and clean it routinely to keep the cleanness.
- 6-4. If the fog volume is too low, the machine generates noise during operation or the fog cannot be smoothly sprayed, please turn off the power immediately and check if the fog oil is sufficient, whether the external fuse, controller connection or power supply has any problem. If none of the above shows any problem, insert the power plug again, if the machine still cannot normally operate, please check whether the hose connecting to the fog oil tank is blocked, any fluid is flowing. If the cause cannot be identified, please do not allow the machine to operate to avoid the damage of it. The machine shall be turn off immediately to cooling down, please contact Antari dealer or the designated service center. Do not disassemble it by yourself.
- 6-5. The feature of DNG-200 is to allow the fog flowing along the surface of the floor after outputting, after using it for a long time, the floor will become slippery due to the moisture. Please note the material of the floor and pay special attention to the safety of the performers or walking on it.
- 6-6. DNG-200 is a low fog special effect machine that does not use dry ice. It is very environmental friendly and safe. However, the output fog is easily to be blown away by wind. Please pay attention to the impact caused by fan or air conditioning while in use.

## 7. Maintenance of the machine

- 7-1. Please routinely clean your DNG-200 Low Fog Generator, it will effectively help you to lower the parts replacing rate or maintenance cost.
- 7-2. Please do not contaminate fog oil, put the cap on the oil tank at all time and the cap of the fog oil tank equipped on the machine.
- 7-3. Prior to the storing of the machine when not in use, please clean it first and to make sure the oil tank is emptied. Disconnect and store the fog pipe and power cord, store the machine and parts into the parts tank located in front of the machine. Warm up the machine once a month, it can be protected from the moisture.
- 7-4. Please store the machine in a cool area.

## 8. DNG-200 Low Fog Generator Specifications

Power	AC 100~120V/ 50~60Hz	AC 220~240V / 50~60Hz
Power Consumption (Compressor)	750 W	600 W
Refrigerant	R-404A, 1.75LB	R-404A, 1.75LB
Rated Current	6.7A	3.2A
Start Current	61 A	21 A
Capacity	3200 BTU/ hr	2745 BTU/ hr
Compressor's Breaker	15A 250V	10A 250V
Heater	1450W	2500W
Output	12,000 cu.ft / min	12,000 cu.ft / min
First Heat-Up Time	24 min	12 min
Fog Machine's Breaker	15A 250V	15A 250V
Tank Capacity	10 liters	10 liters
Fluid Consumption Rate	11 min/ liter (High output)	11 min/ liter (High output)
Remote Included	D-20 (LCD Timer Panel Controller; 2 m)	
Accessory Included	3m Fog Conducting Hose	
Weight	120 Kg	
Dimensions (mm)	L 780 W 608 H 686 ( mm )	
Liquid Used	Antari FLR (Light Fog Liquid) Only	
DMX Channel DMX	One Channel	
Additional information	Self Contained Unit-- No CO <sub>2</sub> / Dry Ice Required	
	Floor-Mount installations ( 4 wheels)	

## ***Antari DNG-200 Built-in DMX 512 Setting***

DNG-200 is featured with built-in DMX 512 function and equipped with a 3-pin and a 5-pin male-female connectors. When the machine is in use, either 3-pin or 5-pin connector can be selected to connect to DMX controller. DNG-200 only uses one control channel, the output value of each channel is between 0-255. After DMX-200 controller is connected, the time of action, volume of fog output and interval of fog output are all controlled by DMX controller, they will not be controlled by D-20 of the machine anymore.

By using the same DMX system you are able to easily connecting fog generators, lighting and other special effect machine to have a whole system performance.

	High Volume 192-255	192-255 = High Volume ( 60 % Output )
	Medium Volume 127-191	127 – 191 = Medium Volume ( 52% Output )
	Low Volume 32-126	32 – 126 = Low Volume ( 35% Output )
	Off 0-31	0 - 31 = Off

If the value is set between 0-31, then the machine is not able to have sufficient output volume to run.

If the value is set between 32 to 126, then the machine is able to output a minimum output volume 35%.

If the value is set between 127 to 191, then the machine is able to output a median output volume 35%.

If the value is set between 191 to 255, then the machine is able to output a maximum output volume 60%.

**Please save this user manual carefully**